

## **ABSTRACT**

A method for transmitting encoded data between synchronized sending and receiving digital systems across a lossy transmission media, said sending and receiving digital systems maintaining encoder and decoder information records, said  
5 method comprising the steps of:

encoding packet data to be transmitted by said sending digital system using encoding information in an encoder information record that has been previously acknowledged by said receiving digital system;

10 building a new encoder information record including the encoding information used to encode said packet data as well as the encoded packet data;

transmitting the encoded packet data to said receiving digital system as a packet including a header having a packet number and a tag identifying the encoding information used to encode the packet data;

15 when the packet is received by said receiving digital system, examining the header to determine the encoding information used to encode said packet data;

decoding the packet using corresponding decoder information in said decoder information record and updating the decoder information in said decoder  
20 information record using said packet;

acknowledging processing of the packet to said sending digital system to enable said sending digital system to update said encoder information so that said new encoder information record is used to encode packet data; and

when the packet is lost, conditioning said encoder information to  
25 rebuild the new encoder information without the lost packet data.